AMENDMENTS TO THE CLAIMS

1. (**Currently Amended**) A perfusion cannula system for directing blood through the vasculature of a patient, comprising:

a cannula body comprising a proximal end, a distal end, and at least one lumen extending therebetween;

a balloon located on an exterior surface of the cannula body, ~~wherein the balloon has a tubular configuration~~ such that when the balloon is deployed a recess is defined between an outside surface of the balloon and an outside surface of the cannula body ~~that defines a passive perfusion lumen when deployed~~; and

means for deploying the balloon within the vasculature;

whereby space may be provided between a vessel wall and the recess ~~cannula body~~ when the cannula body resides within the patient to permit blood flow past the cannula body~~, and through the passive perfusion lumen of the balloon~~.

2. (**Canceled**)

3. (**Original**) The cannula system of Claim 1, wherein the balloon comprises a first balloon and further comprising at least a second balloon spaced radially from the first balloon.

4. (**Original**) The cannula system of Claim 1, further comprising a second lumen.

5. (**Original**) The cannula system of Claim 1, wherein the deploying means comprises an inflation lumen.

6. (**Currently Amended**) A perfusion cannula system for directing blood through the vasculature of a patient, comprising:

a cannula body comprising a proximal end, a distal end, and at least one blood flow lumen extending therebetween for providing blood flow through the cannula body; and

means for creating space ~~around~~ between an outside surface of the cannula body and ~~within~~ the vasculature to permit passive perfusion blood flow downstream from the cannula body external to the space creating means.

7. (**Original**) The cannula system of Claim 6, wherein the space creating means is coupled with the cannula body.

8. (**Original**) The cannula system of Claim 6, wherein the space creating means is integral with the cannula body.

9. (**Original**) The cannula system of Claim 6, wherein the space creating means comprises a collapsible element.

10. (**Original**) The cannula system of Claim 6, wherein the space creating means comprises an expandable element.

11. (**Currently Amended**) A perfusion system for directing blood through the vasculature of a patient, comprising a multilumen cannula and a plurality of radially spaced balloons configured to be selectively inflated while residing within the vasculature to create ~~space~~ at least one blood flow passage defined in part by outer surfaces of the multi-lumen cannula and at least two adjacent balloons around the multilumen cannula within the vasculature to permit blood flow through the blood flow passage past the multilumen cannula, the multilumen cannula comprising a first lumen having a first length for delivering or removing blood from the vasculature of the patient, and the multilumen cannula comprising a second lumen having a second length for delivering or removing blood from the vasculature of the patient, the first length being greater than the second length.

12. (**Original**) The perfusion system of Claim 11, wherein the balloons are integrally formed with the cannula.

13. (**Original**) The perfusion system of Claim 11, wherein the cannula comprises inflation lumens.

14-19. (**Canceled**)

20. (**Currently Amended**) A perfusion cannula system comprising:

a cannula body comprising a proximal end, a distal end, a means for providing blood flow to the vasculature of a patient, and a means for enhancing blood flow past the cannula when the cannula body resides within the patient by creating a blood flow passage defined by an exterior surface of the cannula body and a vessel wall.

21. (**Original**) The cannula system of Claim 20, wherein the enhancing means is capable of selectively enhancing blood flow past the cannula.

22. (**Original**) The cannula system of Claim 20, wherein the enhancing means comprises at least one balloon.

23-40. (**Canceled**)

41. (**Currently Amended**) The cannula system of Claim 1, wherein ~~the passive perfusion lumen defined by~~ the balloon has a generally circular cross-section.

42-45. (**Canceled**)